UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,599	06/19/2006	Wilhelmus Jacobus Van Gestel	NL031485	8341
	7590 06/03/200 LLECTUAL PROPER		EXAMINER	
P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			DAZENSKI, MARC A	
BRIARCLIFF	MANOK, NY 10510		ART UNIT PAPER NUMBER	
			2621	
			MAIL DATE	DELIVERY MODE
			06/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Office Action Summary	10/596,599	VAN GESTEL, WILHELMUS JACOBUS	
omoo nodon cammary	Examiner	Art Unit	
	MARC DAZENSKI	2621	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence add	ress
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	J. nely filed the mailing date of this con (35 U.S.C. § 133).	,
Status			
 1) Responsive to communication(s) filed on 19 Ju 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowant closed in accordance with the practice under Ex 	action is non-final. ace except for formal matters, pro		merits is
Disposition of Claims			
4) ☐ Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-19 is/are rejected. 7) ☐ Claim(s) 5, 10 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examiner	election requirement.		
 10) ☐ The drawing(s) filed on 19 June 2006 is/are: a) Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Example 10. 	drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFF	
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priorical application from the International Bureau * See the attached detailed Office action for a list of 	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National S	Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte	

DETAILED ACTION

Claim Objections

Claims 5 and 10 are objected to because of the following informalities: the claims refer to "NA" audio streams, "NG" graphics streams, and "NV" video streams, as well as "NA" audio blocks, "NG" graphics blocks, and "NV" video blocks. It is unclear to what the terms "NA," "NG," and "NV" are referring, and the examiner interprets this to mean "a number of." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 provides for the use of recording an information stream on a record medium, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products*, *Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent1 and recent Federal Circuit decisions2 indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example, if the "record medium" of claim 1 is interpreted to be a piece of paper and the act of "recording an information stream" is interpreted to be writing on said piece of paper, then the creation of figure 3A in the specification would adequately read on the limitations of the claim.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and

¹ Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

² In re Bilski, 88 USPQ2d 1385 (Fed. Cir. 2008).

computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 7-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 7 defines a record medium, preferably an optical disc, embodying functional descriptive material. However, the claim does not define a computer-readable medium or computer-readable memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. Further, the specification at page 1, lines 5-7 discloses that the invention may be drawn to record mediums other than an optical disc, which the examiner maintains may include non-statutory subject matter such as a signal. Any amendment to the claim should be commensurate with its corresponding disclosure.

Note:

A "signal" (or equivalent) embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwagi et al (US Patent 6,907,190), hereinafter referred to as Kashiwagi, in view of Yamauchi et al (US Patent 6,088,507), hereinafter referred to as Yamauchi.

Regarding **claim 1**, Kashiwagi discloses a method and an apparatus for reproducing bitstream having non-sequential system clock data seamlessly therebetween. Further, Kashiwagi discloses recording a multimedia bitstream to a recording medium, which reads on the claimed, "method for recording an information stream (M) on a record medium (2)," as disclosed at column 10, lines 25-30 and exhibited in figure 2; the multimedia bitstream including multiangle data, which reads on the claimed, "the information stream comprising a plurality of alternative streams (VSI; VS2; VS3)" as disclosed at column 12, lines 48-54, column 18, lines 25-57; and wherein the data is interleaved, which reads on the claimed, "wherein the alternative streams

(VSI; VS2; VS3) of the information stream are recorded in an interleaved manner," as exhibited in figures 21-24 and 27-28;

wherein the data is divided into VTS's, which reads on the claimed, "wherein each of the alternative information streams (VSI; VS2; VS3) is divided into alternative information stream blocks (VSBI(i); VSB2 (i); VSB3 (i))," as exhibited in figures 22;

and wherein the multimedia bitstream is recorded in VOB's comprising the video information and therefore the multi-angle data, and further plural system streams are interleaved with the ILVU as the smallest unit are defined as an interleaved block, which reads on the claimed, "and wherein the information stream is recorded as a succession of consecutive interleaved units (IU(i)), each interleaved unit (IU(i)) comprising... one corresponding block (VSBI(i); VSB2(i); VSB3(i)) of each of the alternative information streams (VSI; VS2; VS3)," as disclosed at column 25, lines 31-37 as well as exhibited in figures 21-24,27-28, and 71.

However, Kashiwagi fails to disclose the information stream comprising and at least one common part (AS1; AS2; GSI; GS2), as well as wherein each of the common information stream parts (AS1; AS2; GSI; GS2) is divided into common information stream blocks (ASBI(i); ASB2 (i); GSBI(i); GSB2 (i)); and the common information stream blocks being separate from the alternative information stream blocks. The examiner maintains it was well known in the art to include the missing limitations, as taught by Yamauchi.

In a similar field of endeavor, Yamauchi discloses a multimedia optical disc for storing audio data and sub-picture data in a plurality of channels as well as moving

picture data and apparatus and method for reproducing the multimedia optical disc. Further, Yamauchi discloses video title sets VTS that comprise a plurality of pieces of audio data, a plurality of pieces of sub-picture data, the audio being different languages and the sub-pictures being different subtitles, the audio and sub-pictures selectable with a remote control, which reads on the claimed, "the information stream comprising and at least one common part (AS1; AS2; GSI; GS2), as well as wherein each of the common information stream parts (AS1; AS2; GSI; GS2) is divided into common information stream blocks (ASBI(i); ASB2 (i); GSBI(i); GSB2 (i)); and the common information stream blocks being separate from the alternative information stream blocks," as disclosed at column 8, lines 9-38; column 16, lines 1-11; and exhibited in figure 3.

Therefore, it would have been obvious to modify the method of Kashiwagi to include video title sets VTS that comprise a plurality of pieces of audio data, a plurality of pieces of sub-picture data, the audio being different languages and the sub-pictures being different subtitles, the audio and sub-pictures selectable with a remote control, as taught by Yamauchi, for the purpose of enabling a user to select one of a plurality of foreign languages for a given video.

Regarding **claim 2**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above (wherein figure 3 of Yamauchi clearly exhibits the audio and sub-picture blocks are separate from video data).

Regarding **claim 3**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 4**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 5**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 4). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 4 above (wherein Kashiwagi discloses at column 38, lines 59-61 that these multi-angle scenes are freely selectable by a viewer).

Regarding **claim 6**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 1). Further, Kashiwagi discloses an optical disc storing the multimedia bitstream, which reads on the claimed, "wherein the record medium (2) is an optical disc," as exhibited in figures 2-4.

Regarding **claim 7**, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 8**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 7). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 2 above.

Regarding **claim 9**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 7). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 4 above.

Regarding **claim 10**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 9). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 5 above.

Regarding **claim 11**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 7). Further, Kashiwagi discloses reproducing the content of each title unit according to the user-defined scenario, which reads on the claimed, "method for reading a record medium according to claim 7," as disclosed at column 10, lines 43-45; the method comprising:

the user then inputting the desired scenario based on video, sub-picture, and audio portions of a multimedia title edited by the author encoder (EC), which reads on the claimed, "a) selecting at least one common information stream (AS1, GS2); b) selecting one (VS2) of the alternative information streams (VSI, VS2, VS3)," as disclosed at column 11, lines 3-18;

sub-picture decoder (3100) outputting information to sub-picture buffer (2700) as well as audio decoder outputting information to audio buffer (2800), which reads on the claimed, "c) reading the common information stream block (ASBI(i); GSB2(i)) of said at least one selected common information stream (AS1, GS2) associated with one interleaved unit (IU(i)); d) storing the information from the one common block read into a buffer memory (MA; MG)," as disclosed at column 12, lines 19-21 and 32-35;

Application/Control Number: 10/596,599 Page 10

Art Unit: 2621

video decoder (3800) outputting information to video buffer (2600), and then synthesizer (3500) superimposing the video signal and sub-picture signal to generate and output the multi-picture video signal to the video data output terminal (3600), which reads on the claimed, "e) reading the alternative information stream block (VSB2(i)) of the selected one (VS2) of the alternative information streams (VSI, VS2, VS3) associated with said one interleaved unit (IU(i)); f) simultaneously outputting the alternative information stream block (VSB2(i)) in combination with the common information stream block (ASBI, GSB2) from said buffer memory (MA; MG)," as disclosed at column 12, lines 28-32.

Regarding **claim 12**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 11). Further, Kashiwagi discloses it is possible to change scenarios while playback is in progress and to dynamically select and reproduce any of plural scenes while reproducing the title content according to a desired scenario, which reads on the claimed, "wherein steps (c)-(f) are repeated for each following interleaved unit (IU(i+1))," as disclosed at column 12, lines 55-64.

Regarding **claim 13**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 11). Further, the limitations of the claim are rejected in view of the explanation set forth in claims 3 and 11 above.

Regarding **claim 14**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 11). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 11 above.

Application/Control Number: 10/596,599 Page 11

Art Unit: 2621

Regarding claim 15, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 11). Further, Kashiwagi discloses reading head (2006), signal processor (2008), reproduction controller (2002), recording media drive unit (2004), and stream buffer (2400), which reads on the claimed, "reading means (5) for reading the record medium (2); an actuator (6) for positioning the reading means with respect to the track (3) of the record medium (2); a controller (30) for controlling the actuator (6), the controller having an input receiving a read signal (SR) from said reading means (5); the controller being provided with at least one buffer memory (MA; MG) for storing the blocks of at least one of the common information streams," as disclosed at column 10, line 56 through column 11, line 2; and exhibited in figure 3.

Regarding **claim 16**, the combination of Kashiwagi and Yamauchi discloses everything clamed as applied above (see claim 14). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 14 above. Still further, Kashiwagi discloses separate video buffer (2600), sub-picture buffer (2700), and audio buffer (2800), which reads on the claimed, "wherein the controller is provided with a plurality of buffer memories (MA; MG) of different type, for storing the blocks of the selected common information streams of different type," as exhibited in figure 3.

Regarding **claim 17**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 14). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 16 above.

Regarding **claim 18**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 14). Further, Kashiwagi discloses scenario selector (2100) comprising a keyboard, CPU, and monitor so that the user can input the desired scenario, which reads on the claimed, "further comprising user input means (11) for allowing a user to input a selection of an alternative information stream (VS2) and a selection of at least one common information stream (AS1; GS2)," as disclosed at column 29, lines 61-65.

Regarding **claim 19**, the combination of Kashiwagi and Yamauchi discloses everything claimed as applied above (see claim 14). Further, Kashiwagi discloses authoring decoder (DC) which comprises video data output terminal (3600) and audio data output terminal (3700), which reads on the claimed, "audio/video reproduction system (1) comprising a disc drive according to claim 14, the system further comprising a display device (20) comprising at least one screen (21) for displaying images and at least one loudspeaker (22) for generating sound," as disclosed at column 10, lines 51-56 and exhibited in figure 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571)270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571)272-7905. The fax phone

Application/Control Number: 10/596,599 Page 13

Art Unit: 2621

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/ Supervisory Patent Examiner, Art Unit 2621

/MARC DAZENSKI/ Examiner, Art Unit 2621